

**REMARKS**

Claims 1-5 are pending in this application. New claims 6-9 have been added. These claims find support in the original specification of the parent application, filed June 12, 2002. See, *inter alia*, the claims submitted in the parent application.

The application was rejected based on certain issues with the drawings and certain claim objections. It is respectfully submitted that all issues have been resolved by this response and the application is in condition for allowance.

**DRAWINGS**

In the action, the drawings were objected to for various reasons. Each will be dealt with in turn.

First, the action states that the "bottom layer 205 in figure 2D should be -203- See page 11, line 30." Figure 2D shows a top view of a planarized structure in which excess copper has been removed. The top view shows two features, one labeled 221 and other labeled 205. According to the specification, reference number 205 represents a second or upper dielectric layer. Reference number 221 represents an exposed pattern of conductive lines.

Thus, it becomes necessary to planarize the structure and remove the excess copper from the device. Planarization removes material down to the level of the top of dielectric layer 205. This results in an exposed pattern of conductive lines 221 in dielectric layer 205 and vias in dielectric layer 203. See the cross-sectional view of Figure 2C and the simplified top view of Figure 2D. Page 11, lines 27-31

Thus, Figure 2D and shows a top view and Figure 2C shows a cross-sectional view of a structure after planarization. When viewed together, it can be seen that the top

view of Figure 2D should show second dielectric layer 205 and exposed pattern of conductive lines 221. After planarization, one would not see the lower dielectric layer 203 from a top view.

In view of these remarks, it is respectfully requested that the objection to Figure 2D be withdrawn.

Next, the action notes that "there is no description of  $\lambda$ ." The Greek letter Lambda ( $\lambda$ ) appears in Figure 3A, above optical element 311. This Greek letter is widely used as a shorthand for electromagnetic radiation or light. Lambda ( $\lambda$ ) appears in many mathematical expressions representing the nature of light; ( $\lambda$ ) represents the wavelength of light in such expressions. Given the well-understood and consistent usage of  $\lambda$  to represent electromagnetic radiation in physics, it is respectfully requested that this objection to the drawings be withdrawn.

Finally, the action states that

there are no hard mask material (303), photoresist (305), surface (301), layer (313) in figure 3A. See page 16.

The first two paragraphs of page 16 have been amended to address this issue. In view of these amendments it is respectfully requested that this last objection to the drawings be withdrawn.

#### CLAIM OBJECTIONS

The Examiner has objected to the claims as reciting a feature that is not described in the specification. Specifically, the Examiner states that the following recitation in claim 1 is found in the specification:

a plurality of columnar gaps in the dielectric, which columnar gaps have an average feature dimension that is not greater than about 0.4 times the defined line width.

To obviate the objection, the specification has been amended to recite this feature in the paragraph beginning at page 7, line 25. This amendment finds support in the original filed parent application (US Serial No. 10/171,289, filed June 12, 2002) at claim 47. Withdrawal of the claim objection is respectfully requested.

CONCLUSION

Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,  
BEYER WEAVER & THOMAS, LLP



Jeffrey K. Weaver  
Reg. No. 31,314

P.O. Box 70250  
Oakland, CA 94612-0250  
(510) 663-1100